A PILOT IMPLEMENTATION OF PALLIATIVE CARE SCREENING IN THE PRIMARY CARE SETTING

by

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DEDICATION

I dedicate this project to my family and friends. Their support and love helped me complete this project and degree requirements. I would also like to express my gratitude to my mentor, committee chair, and friend, Susan Luparell. Her guidance and confidence in me enabled me to continue. And thank you to the healthcare team that implemented this project. Without these wonderful people, this project would not have happened.

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ABSTRACT

Palliative care is described by the World Health Organization (2020) as an approach that improves the quality of life of patients and their families who are facing problems associated with life-threatening illness. With palliative care, patients experience improved quality of life, decreased health care costs, and caregivers experience a greater support system. Despite these benefits, patients in the primary care setting are not being screened for palliative care needs, and therefore the aim of this doctor of nursing practice quality improvement project was formal palliative care screening in the primary care setting. This project was implemented at a primary care clinic with an aging population where before implementation there was no palliative care screening occurring, which made it an optimal clinic to implement screening. A six week implementation period took place between January 6, 2022, and February 24, 2022. Patients aged 70 and older who presented to the clinic for an appointment were screened for palliative care needs using the SPICT screening tool. Findings included: 68% of the patients that fit screening criteria were screened for palliative care needs; of those that were screened, 12% screened positive for palliative care needs; and healthcare staff reported a more than ideal satisfaction with the screening process and screening tool. Project results met two out of three SMART goals, as the goal that 100% of patients who fit screening criteria would be screened was not met, while the goal that the percent of positive would be reported and the goal that staff would have a more than ideal satisfaction with the screening process and tool were met. Though findings paralleled the literature that described the SPICT screening tool as an effective screening tool for palliative care needs and staff reported increased awareness and knowledge on palliative care needs for those patients who would benefit from it. Additionally, there is not enough data to decide implications for the community as a whole related to palliative care needs.

CHAPTER ONE

PALLIATIVE CARE DEFINITION

Introduction

Palliative care is described by the World Health Organization (2020) as an approach that improves the quality of life of patients and their families who are facing problems associated with life-threatening illnesses. It prevents and relieves suffering through early identification, correct assessment, and treatment of pain and other problems, whether physical, psychosocial, or spiritual (World Health Organization, 2020). Palliative care is an important care strategy for individuals dealing with advancing illnesses, as it examines the whole patient and helps deal with multiple aspects of the disease. This project focused on palliative care, specifically the screening for palliative care needs in the primary care setting.

Benefits of Palliative Care

Quality of Life

A patient's quality of life is always an important aspect of their health care but becomes especially significant with an advanced illness. Palliative care can improve a patient's quality of life at a time when a disease process is amplified. McAteer and Wellbery (2013) found that palliative care can provide better symptom management, decrease symptom burden, lessen depression, increase control for the patient, and avoid risks associated with treatment and hospitalization in many chronic illnesses. In a randomized controlled trial of individuals with advanced cancer, Vanbutsele et al. (2018) assigned patients to either early and systematic

integration of palliative care with oncological care or standard oncological care alone; they found that those in the palliative care group had improved quality of life. This study displayed the importance of palliative care for individuals with advanced illness and early integration of palliative care is more beneficial than palliative consultations on demand. Other improvements seen in the quality of life for patients with dementia in palliative care were a greater concordance between family decision-makers and clinicians on goals of care and end-of-life choices, improved symptom management, decreased emergency room visits, and improved prescribing behavior (Senderovich et al., 2019). In another review of patients with heart failure, the results showed improved communication between family and health care providers, increased focus on complete care needs, and improved work with psychological and social issues of patients (Pastor & Moore, 2013). Overall, the integration of palliative care for adults with an advanced illness can improve quality of life through increased understanding of care needs between families and providers, improved management of symptoms and control of pain, decreased hospital admissions, and improved psychosocial care.

Decreased Costs

As the population ages, the demand for health care is growing, raising costs, and placing an increased burden on health care systems. Reducing these costs while improving patient experience is an important aspect of care as it helps to reduce the financial strain on the patient. Palliative care leads to decreased costs with improved utilization of health care resources and a total reduction in medication and pharmacy costs for families (McAteer et al., 2013; Senderovich et al., 2019). A systematic review by Gonzalez-Jarammilo et al. (2021) presented that palliative care consistently reduced the number of hospital visits, length of stay, and overall hospitalization

costs for both oncological and non-oncological patients. Though more outpatient resources are being utilized, higher savings in hospital costs counterbalance this (Gonzalez-Jarammilo et al., 2021). In another systematic review, Yadav et al. (2020) specified the exact cost savings to include $1,285-$20,719 for inpatient palliative care, $1,000–$5,198 for outpatient and inpatient combined, $4,258 for home-based care, and $117–$400 per day for home/hospice palliative care. These decreased health care costs can lessen the burden on the health care system, the patient, and their family at a time when costs should not be a worry.

Caregiver Support

Support from family and friends (caregivers) is essential for an individual with advanced disease, and the caregiver experience is an important aspect of care. In a study completed by Paul and Fernandes (2019), caregivers stated they wished they had been referred to palliative care sooner in their family member's disease process, as there are multiple benefits for both themselves and their family member. McAteer and Wellbery (2013) found an added benefit, as caregivers demonstrate greater satisfaction with the quality of care and attention to caregiver needs. In a randomized controlled trial, El-Jawahri et al. (2017) assessed the experience of caregivers for patients with advanced illness, comparing palliative care integrated with oncology care versus oncology care alone. The results show that caregivers' psychological symptoms, such as distress and depression, were lessened when palliative care was in place (El-Jawahri et al., 2017). Caregivers are able to be present and provide increased support for their loved ones when their own needs are being met and when they have open communication with the palliative care team.

Lack of Screening in Primary Care

Patients have a stronger bond with their primary care team because they frequent their primary care provider's office more often than a specialist or a hospital. Primary care teams are the first point of contact and the key coordinators of care for patients (Clifford et al., 2016). Screening for palliative care needs should be an important task in the primary care setting. Despite this, screening is not occurring. In the primary care setting, palliative care services and documentation are geared more toward patients with cancer than patients with other non-malignant conditions that would benefit from palliative care (Walsh et al., 2017). Only 20% of individuals with non-malignant conditions had any palliative care documented, and most are not formally identified for a palliative care approach before they die (Walsh et al., 2012). Downar et al. (2019) also found that many patients, especially those with noncancer illnesses, did not receive palliative care prior to death due to the inability to reliably identify people who could benefit from it. It appears that primary care providers do not identify patients who could benefit from palliative care because they do not screen for the need. Individuals could be identified through a screening process. Other barriers that have been identified for lack of palliative care referral are lack of prognostic indicators and clinical triggers to identify a limited life prognosis (Maas et al., 2013). These barriers could also be improved with a formal screening process. Last, Hamano et al. (2019) discuss that many primary care providers feel that they lack sufficient knowledge and skill to appropriately assess such unmet needs, but most felt this could be improved with the use of a tool that could facilitate efficient identification of such needs.

Relevance to Practice Setting

Palliative care can be an important resource for patients; it improves the quality of life and decreases health care costs. For a patient to have access to palliative care, they must be referred by their provider. In order to be referred, a patient must be screened for palliative care needs. It has been documented that there is a lack of screening for palliative care needs in the primary care setting on an international and national level (El Mokhallalati et al., 2020; Walsh et al., 2017; Harrison et al., 2012). To determine the extent of the issue locally, interviews were conducted with a provider who owns and practices in a primary care clinic. These interviews confirm that screening for palliative care is needed but is not being conducted locally (Primary care provider [PCP], personal communication, August 26, 2021). The provider manages aging patients with advancing illnesses that would benefit from palliative care (PCP, personal communication, August 26, 2021). A review of existing research and interviews with the provider indicated that implementing this screening would assist in identifying patients who would most benefit from such an approach. Providing patients with quality, cost-effective, and patient-centered care is a mission of both this clinic and the project. Therefore, the purpose of this project is to implement formal palliative screening at this local primary care clinic.

CHAPTER TWO

COMPARISON OF SCREENING TOOLS

Introduction

In order to appropriately screen for palliative needs, a pertinent tool must be chosen. A librarian was consulted, and a literature search was completed to confirm the available tools and their usefulness in the practice setting. The Web of Science, CINAHL, and Google Scholar databases were searched using the terms "palliative care," "screening," and "primary care." Two systematic reviews and one mixed-methods approach involving a systematic literature search and key informant interviews were found. These results will be discussed.

Multiple screening tools are in clinical use internationally for the identification of palliative care needs in the primary care setting. There is no recommendation of one tool over another by an international or national organization. Because of this, the tools assessed in these systematic reviews were compared for usability and accuracy in the local primary care clinic. Though there are many tools available, four tools will be reviewed here based on their prevalence of use in the clinical setting as learned from the systematic reviews. These tools are the Surprise Question (SQ), the Supportive and Palliative Care Indicators Tool (SPICT), the Gold Standards Framework-Proactive Identification Guidance (GSF PIG) tool, and the Palliative Needs NECPAL (NECPAL) tool.

The first systematic review was completed to highlight the existing screening tools and compare the accuracy of these tools (El Mokhallalati et al. 2020). The SQ was the first palliative screening tool developed and can be used in isolation or with other tools (El Mokhallalati et al.,

2021). This tool has easy usability, as the provider answers just one question instead of multiple. It has been widely researched in different settings with a specificity of 61.0%, 83.6%, and 94.4% and a sensitivity of 79.0%, 69.3%, and 20.5% (El Mokhallalati et al., 2021). The second screening tool is the SPICT, which was developed using a process of literature review, peer review, and a prospective case-finding study. This one-page tool consists of a combination of disease-specific indicators and general indicators of deteriorating health. Research across a wide range of inpatient and outpatient clinical settings has occurred with this tool with a specificity of 95.8% and a sensitivity of 34.0% from one study (El Mokhallalati et al., 2021). The third tool, GSF PIG, is a one-page tool that uses the SQ along with general and disease-specific indicators of decline and increasing need. This tool is applicable across care settings, but limitations do exist as no validation studies have been performed. The last tool, NECPAL, was developed in Spain and is based on the SPICT and GSF PIG tools. This two-page tool combines the SQ with general clinical indicators of severity and progression and specific indicators for certain medical conditions (El Mokhallalati et al., 2021). Validation has occurred for this tool in a wide variety of care settings, with a specificity of 91.3% and a sensitivity of 32.9% (El Mokhallalati et al., 2021). These four tools have their strengths and weaknesses. This systematic review had a broad search strategy and assessed the quality of the validation of studies by two reviewers but could have missed important studies in the research field (El Mokhallalati et al., 2021). There is no current consensus for a reference standard on which to base the accuracy of a screening tool, so this could not be assessed, and data were universally missing on how many patients identified by the screening tools had palliative care needs. A second systematic review was studied to help clarify which tool fits best for this project.

This second review used a mixed-methods approach, with a systematic literature search and a questionnaire survey among key informants. It identified four screening tools for the primary care setting. Two of these were the SPICT and GSF PIG tools. The strengths of this review included the mixed-methods approach, a systematic literature review supplemented by a questionnaire survey of key informants of palliative care in the primary care setting across multiple countries (Maas et al., 2013). This systematic review found the same lack of validation for screening tools and limited inclusion of psychological, social, or spiritual indicators for palliative care (Maas et al., 2013). Responses from the key informants highlighted other features and found that the United Kingdom, which is a country that advocates tools for use in primary care, generally uses the SPICT or the GSF PIG in the primary care setting (Maas et al., 2013). The respondents also stated that the GSF PIG was considered to be a good platform to build an international framework for the identification of palliative care needs, but the study states this tool would have been missed without the respondents' interviews (Maas et al., 2013). Key points from informants regarding the usability of the tools were revealed and helped inform which tools are in general use today. This built on previous information and assisted the third systematic review in narrowing down tools with greater usability.

The third systematic review relayed what the previous two have stated—the limited evidence for tools that can identify palliative patients early in the disease process. Walsh et al. (2017) identified three of these tools: the GSF PIG, SPICT, and the NECPAL. The GSF PIG had significant uptake in practice but again found it had not improved early identification of palliative care needs (Walsh et al., 2017). They found that the SPICT was developed based on a literature review, prospective case study, and peer review, which helped it to undergo re-evaluation, improvements, and validation in inpatient and outpatient settings (Walsh et al.,

2017). The NECPAL proved that there was a shift from institutional to community approaches and was currently undergoing further evaluation at the time of this study's release (Walsh et al., 2017). Overall, they found that the GSF PIG and SPICT may be easier to use at the time of consultation with a patient. Also, the SPICT being one page and the GSF PIG being three pages, made the SPICT more convenient for use (Walsh et al., 2017). This review showed strength in its search methods, data collection, and analysis. The grey literature was not searched, but to rectify this, international experts were contacted and asked to identify relevant studies (Walsh et al., 2017). This review provided a framework to look at the screening tools and identified that they can assist with communication between providers and patients on palliative care needs. This review determined that the tools continue to be refined but have a purpose in the primary care setting.

Based on the lack of recommendation for palliative care screening tools in the primary care setting, the strengths, and limitations of the tools discussed in the systematic reviews were reflected upon. Important factors considered were usability and accuracy. Usability includes the length and understanding of the tool. As the NECPAL and GSF PIG are longer than one page, they were not chosen as the length would potentially hinder the screening process. Accuracy includes the screenings' ability to accurately identify patients' needs for palliative care. The SQ was not investigated further for this reason, as it is based solely on the practitioners' thoughts on the patients' status, and research has shown practitioners feel they lack the knowledge and skill to appropriately assess this (Hamano et al., 2019). The SPICT, a one-page tool, has been shown to accurately identify palliative care needs. Although there has not been a formal recommendation from an overarching organization, this tool is used in many primary care settings today (El Mokhallalati et al., 2021; Maas et al., 2013; Walsh et al., 2017). It has been

studied in various countries and organizations, with benefits outweighing the risks. Consequently, the SPICT tool was investigated further, and its implementation in the clinical setting was reviewed.

Review of the SPICT

The SPICT palliative care screening tool has been implemented in primary care settings, and its strengths and limitations will be examined. Hamano et al. (2019) applied palliative care screening with the SPICT tool in 17 clinics with 22 general practitioners. They found that 17.3% of patients aged 65 years and older screened positive for palliative care needs (Hamano et al., 2019). This high prevalence of individuals that screened positive for needing palliative care needs were not using a care service, and only 3% were using specialized palliative care (Hamano et al., 2019). These results help to realize how important the screening is, as many of the patients who screened positive were not using services. There are some limitations to this study, as only patients over 65 years who visited the clinic on a day selected in advance were screened; therefore, only part of the patient population who may need palliative care was relayed (Hamano et al., 2019). Another limitation is observer bias, as the assessment was completed by the general practitioners of the patients, but a formal evaluation tool was used, which decreased observer bias (Hamano et al., 2019). The last limitation is that this study was conducted in Japan and might be influenced by the Japanese health care system and cultural background (Hamano et al., 2019).

Another study, a retrospective case-control study, looked at the most predictive patient characteristics of risk of death and compared these to variables on the SPICT tool (Woolfield et al., 2019). This data extraction from patients aged 70 years and older who had died showed that

the SPICT tool had a 78% predictive accuracy for identifying patients at risk of death within 6–12 months (Woolfield et al., 2019). The strengths of this study were the standardized process by which they conducted the research and the good predictive value for most of the items on the SPICT tool. Limitations of this study include the controls were not randomly identified, and though the SPICT can demonstrate good predictive value in high-risk populations, the low incidence of death in general practices decreases the predictive value of the tool (Woolfield et al., 2019).

Last, a mixed-methods study looked at quantitative and qualitative analyses when using the SPICT tool in the primary care setting. Through interviews with general practitioners that implemented the SPICT screening, it was determined that a majority of the providers found the tool to be useful and feasible in general practice (Afshar et al., 2020). They also found that it increased their awareness of patients with potential palliative care needs and contributed to initiating actions for these patients (Afshar et al., 2020). This study, with the combined assessment period and follow-up, showed strength with important data on the sensitivity of the SPICT in identifying patients with palliative needs. Limitations include the general practitioners belonging to research practices with an increased drive to implement practice change. Also, having a small and selective sample leads to the need for an interventional study with a larger sample and more representation (Afshar et al., 2020). These studies weighed the accuracy and usability of the SPICT, reporting good predictive value, the ability to identify patients with palliative needs, and easy usability by providers.

Chosen Tool

The SPICT tool has shown to be useful in identifying palliative care needs most of the time. Additionally, providers report the tool is easy to use and stimulates conversation related to palliative care. Validation has occurred in weaker quality studies but needs to be completed with higher quality studies. Risks include the provider's and staff's knowledge about the patient, and their condition still needs to be assessed to complete the screening; providers often feel inadequate in making this decision. Additionally, the screening tool is unable to identify palliative needs all the time and is not recommended by an international or national organization. Based on the usability and accuracy benefits of the SPICT screening outweighing the risks, this tool was chosen to be implemented in the primary care setting for formal palliative care screening.

Importance of SPICT Screening to Clinical Setting

The use of this formal screening tool will provide insight into patients' palliative care needs, remind the provider and care team to discuss palliative care, and subsequently help patients receive palliative care benefits. The provider has shown enthusiasm for this project as it can improve care for the aging population in her clinic and help identify patients' palliative needs (PCP, personal communication, September 30, 2021). As a primary care clinic with an aging population, it is imperative to provide quality care for these patients and to help them make the time they have left on this earth a comfortable and enjoyable one. Palliative care can contribute to this, and formal screening with the SPICT tool will improve the current process.

In summary, a literature review was completed to compare the available screening tools that identify individuals with palliative care needs in the primary care setting. Through this review, the SPICT tool was chosen for further investigation based on its accuracy and usability. Upon further review, the SPICT tool was shown to provide an adequate assessment of palliative care needs in the primary care setting. Because of this, the SPICT screening tool wasused for formal screening of palliative care needs in the primary care setting.

CHAPTER THREE

QUALITY IMPROVEMENT FRAMEWORK

Plan, Do, Study, Act (PDSA) Model

The PDSA model was the quality improvement framework that this project followed. This model is used to improve a process or carry out a change. There are four steps in the PDSA model that mirror the scientific experimental method of formulating a hypothesis, collecting data to test it, analyzing and interpreting the results, and making inferences from these results (Taylor et al., 2013). The PDSA model has been widely accepted in health care improvement and many quality improvement efforts have used this model as a foundation (Taylor et al., 2013). Through continued efforts to improve this model and progress, its development in health care quality improvement is still advancing (Taylor et al., 2013). This model was chosen because it is a model with which the author is familiar, and it is a disciplined way to bring about practice change. Each step, objective, and question are outlined for usability and understanding. They were answered to further the project and align the goal of the project with a succinct plan for implementation. The PDSA cycle first focuses on small practice change, which is aligned with this quality improvement project as it was implemented at a small primary care clinic, during a short time frame, by one graduate student.

This model was adapted to this quality improvement project by preparing a plan with the outlined questions and objectives (see Appendix A). The PDSA model serves as a framework to implement the change first on a small scale, study the collected data, and then act to make refinements for the next cycle (Connelly, 2021). The process change can be manipulated by the

author and stakeholders as they learn what works best in this primary care setting, and actions can be adjusted as needed. This enabled new learning to be built into the process, which was necessary for quality improvements in the complexities of health care today (Connelly, 2021). As Connelly (2021) addresses, criteria for success should be identified, performance should be measured, and the plan for implementation, data collection, and analysis should be reviewed continuously. The PDSA model was used in the implementation and evaluation of this project, and these detailed steps will be discussed in the methods section.

Primary Care Clinic Description

Setting

The project setting was a privately owned outpatient primary care clinic located in central Montana. This clinic serves approximately 950 patients, with ages ranging from newborn to 99+. One provider has owned and practiced in this clinic for approximately nine years, having previously worked in an ambulatory community care hospital for approximately 19 years. Because of this experience, many of the patients this clinic serves are elderly and have received care from this provider for many years. Patients come to this clinic for their preventative care, such as annual wellness appointments, for acute care needs that may arise, such as respiratory or skin problems, and follow-up appointments for chronic illness management or after hospital discharge.

Target Population

The target population for screening was individuals aged 70 years and older who presented to the clinic for an appointment. This age range of individuals was chosen after

completing the literature review and understanding that most studies implemented the screening at this age. The target population for understanding satisfaction with the utility and usability of the screening tool and the process change was the clinic staff.

Description of Stakeholders

There were multiple stakeholders in this project. The first stakeholder was the provider who owns and practices in the clinic. As stated previously, the provider has been in practice for approximately 28 years, nine of which have been at the privately-owned clinic. This provider is the final decision maker for all practice and process changes. The second stakeholder was the manager of the clinic, who has worked at the clinic for approximately four years and has had previous work experience in managerial roles for multiple companies. The next stakeholders were the nurses who worked at this clinic. There are two nurses, one full-time licensed practical nurse and one part-time registered nurse, who have worked at the clinic for nine years and five years, respectively. These nurses were imperative to this project as they were the staff that completed the screenings. The last stakeholder was the scanning staff, who also completes chart prep for the clinic. This individual has worked for the clinic for 10 years and will be the person placing the screening tool in the patients' charts during chart prep. Due to the staff experience and small size of the clinic, all stakeholders know the patient population very well. All these stakeholders played an important role in creating this process change, and ensuring they felt equipped to perform the change was vital.

Facilitators and Barriers to Implementation

With any process change in clinical practice, there are facilitators and barriers to the change, and those specific to this clinical setting will be discussed. The first facilitator was the

clinic staff's general enthusiasm and positivity about improving care for patients. The provider and nurses at this clinic were eager to learn new things and were generally interested in this author's project. Buy-in was achieved from the staff through previous discussions and the education session about the process change. The second facilitator was the small size of the clinic. Buy-in did not need to be achieved from different moving parts or from multiple levels of management. The main stakeholders were the clinic staff, the five individuals that this author knows personally and was able to obtain buy-in from at the beginning of the project. Another facilitator was the relatively low cost of implementing this SPICT tool. Costs included the paper and ink price for printing the tool, which Montana State University provided this author. The staff at the clinic was not paid overtime for the time it took to place the tool in the chart or complete the screening, as it was completed in their scheduled shift time. The last facilitator was the open communication between the author and clinic staff about the process change. With any change in practice, there are uncertainties, and having open communication during this project facilitated a smooth process change. All these facilitators helped this project thrive in the clinical setting.

There were some barriers to the implementation of this project. One of the biggest unforeseen barriers in this project was the increase in COVID cases in the town where it was implemented, and when there is an increase in COVID cases, elderly individuals at the clinic tend to cancel appointments and not frequent the clinic as often. This was learned through discussions with the staff throughout the project's implementation. The staff reported that they were seeing approximately 50–60% of the patient load that they usually see (Clinical staff [CS], personal communication, February 10, 2022). Otherwise, the other predicted barriers of the

increased time to complete the screening and difficulty with process change were counteracted by the staff's buy-in and enthusiasm for this author's project.

Project Goals

SMART Goals

Short term goals:

- 100% of patients aged 70 years and older who present to the clinic for an appointment will be screened for palliative care needs with the SPICT tool.
- 100% of those patients that are screened are identified as positive (having palliative care needs) or negative (no palliative care needs) and the percent of positive is reported.
- Staff will be mostly satisfied (see Appendix C) with the tool and screening process with an average rating of 8 or higher.

Long-term goal:

- 100% of patients who are screened positive are referred to palliative care services. This goal will not be assessed during the planned time frame as it extends beyond the scale of this project.

Project Methods

Steps

Education for the five clinic staff was the first step in implementation and most important as it helped the process change go smoothly. This education was a multi-step process that was implemented during the lunch break on a day that was convenient for clinic staff. The session

involved the author educating the staff on the SPICT screening tool, its purpose, and how it relates to this clinic. Then, the scanner was educated on placing the SPICT tool in the patient's chart during chart prep based on the patient's age. The nursing staff was then educated on how to complete the SPICT screening tool. The empowering education model was used during this educational session. This model refers to in-service training for staff with the goal of self-direction and practicality (Chaghari et al., 2017). Aspects of this that were highlighted during the education session were motivational factors, staff participation in the implementation of the training, and tackling challenges together (Chaghari et al., 2017). The education session was ended with a summary of the implementation plan, and each staff member rated their confidence in the ability to perform the process change and in using the SPICT screening tool on a scale from 1–10 (see Appendix B). The average rating of confidence in using the SPICT tool was 9.5/10, representing a more than ideal confidence in using the SPICT tool. The average rating of confidence in the process change was 9.75/10, representing a more than ideal confidence in the process change.

The steps involved in the process were as follows:

1. During chart prep, scanning staff placed the SPICT tool in the patient's paper chart when patients fit the screening profile.
2. After rooming the patient for their appointment, the nursing staff placed the patient's initials and age on the tool and completed the screening. Nursing staff reported this took approximately 2–3 minutes (CS, personal communication, February 10, 2022).
3. Once the screening was complete, the nursing staff placed the tool in a dedicated folder.
4. At the end of each week, this author then collected the folder and tools.

The PDSA model was followed, and data was collected from staff about the SPICT tool and the process change after the third week of implementation (see Appendix C). Five staff members rated usability, utility, and satisfaction with the SPICT tool with an average of 9.6/10, representing more than ideal usability, utility, and satisfaction with the SPICT tool. When asked if the process change was easy to implement and if they were satisfied with the process change, staff responded with an average rating of 10/10, representing a more than ideal process change. Due to these ratings, the process change and the SPICT tool were not manipulated for the remainder of the project.

Measures and Instruments

The tool that was used for palliative care screening was the SPICT screening tool (see Appendix E). Through the literature review, this tool was chosen for its accuracy, usability, and prevalence in current practice today. This tool includes two sections for screening: general indicators of poor or deteriorating health and clinical indicators of one or multiple life-limiting conditions. The clinical staff completed the screening by circling a factor on the page if the patient fit the criteria. For the general indicators, there were six factors to consider. The clinical indicators section looked at multiple diseases, including cancer, dementia/frailty, neurological disease, heart/vascular disease, respiratory disease, kidney disease, liver disease, and other conditions. Each condition has several factors under it for which a patient might meet the criteria. A positive screening was determined by two or greater general indicators and one or greater clinical indicators being circled. Per the SPICT (2019) official site, no permission was needed to use this screening tool.

Human Subjects Protection

Institutional Review Board (IRB) approval was obtained through the Montana State University IRB. This project was exempt from full review. Permission to conduct the project plan was granted by all staff of the organization. There were no patient identifiers collected during this project. Since the study population was the clinic staff, written consent from the patients was not required for this project. There was no anticipated or observed harm to the participating staff during project implementation. Participation of the clinic staff was voluntary, and they were allowed to cease participation in the project at any time. Consent from the clinic staff who chose to participate was obtained prior to implementation (see Appendix D).

CHAPTER FOUR

RESULTS

Introduction

This quality improvement project was implemented at a primary care clinic by two nursing staff and a scanning staff. After the six-week implementation period, data were collected and analyzed to confirm if the smart goals were met.

The first goal was that 100% of patients aged 70 years and older who present to the clinic for an appointment would be screened for palliative care needs with the SPICT tool. This goal was not met, as 68.4% of patients aged 70 years and older who presented to the clinic for an appointment were screened. The table below represents the number of patients who were screened each week (positive + negative screens = 26) compared to the amount that fit the screening criteria. The 68.4% was obtained by dividing 26 by 38. Reasons why this goal was not met will be discussed later.

Table 1. Number of patients screened each week

Week	**Positive screens**	**Negative screens**	**Total patients that fit criteria**
1	1	3	6
2	1	6	8
3	1	4	7
4	0	4	4
5	0	2	5
6	0	4	8
Total	3	23	38

The second goal was that 100% of those patients screened were identified as positive (having palliative care needs) or negative (no palliative care needs). The percentage of

individuals that screened positive for palliative care needs was 12%. The pie chart below represents the number of positive screens compared to negative screens. This percentage was determined by dividing 3 by 26, the total number of screenings completed. Explanations for the percentage of positives will be discussed later.

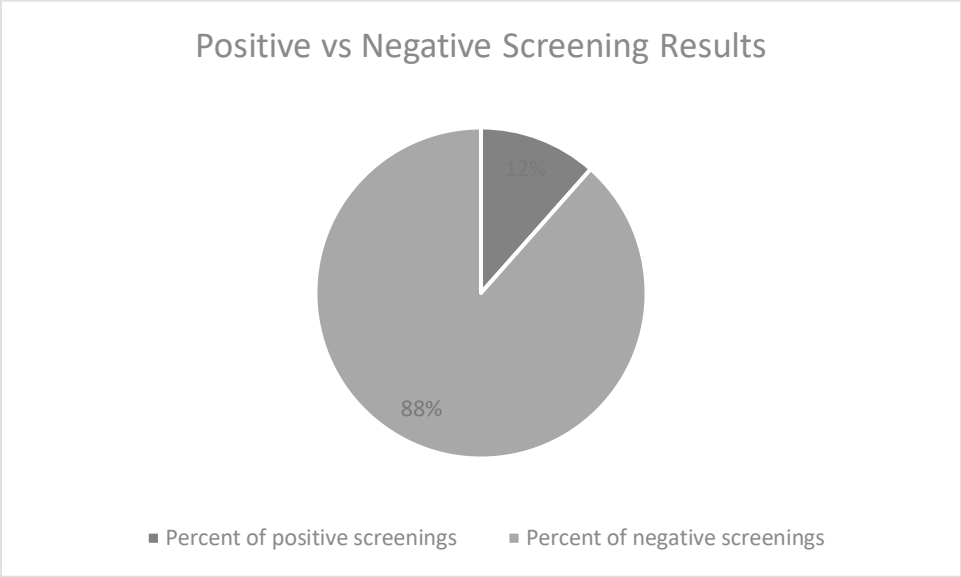

Figure 1. Positive vs. negative screening results

The third goal was that staff would be mostly satisfied with the tool and screening process with an average rating of 8 or higher. At the end of implementation, staff rated satisfaction with the SPICT tool and the process change the same as they had after the third week of implementation with a 9.6/10 and 10/10 respectively.

Discussion

This project aimed to implement palliative care screening in the primary care setting, and this aim was achieved. Palliative care screening was implemented using the SPICT screening tool. Through the literature review, this tool was shown to identify palliative care needs, and staff

reported easy usability and satisfaction with the tool's ability to stimulate palliative care discussions with patients (Afshar et al., 2020). The nursing staff at the primary care clinic stated that the SPICT screening tool increased awareness for potential palliative care needs patients may have and also gave greater clarity to the needs of those patients that screened positive (CS, personal communication, February 25, 2022). Though the general aim of this project was achieved, the findings differed from what this author and primary care clinic staff expected. The goal that 100% of patients aged 70 and older would be screened was not met. One of the factors that contributed to this was the addition of patients the same day or same week to the schedule, which led to the screening tool not being placed in their chart during chart prep (CS, personal communication, February 25, 2022). With no screening tool in the chart, the screening did not occur. To circumvent this in the future, nursing staff stated that they could add the screening tool to the chart before rooming the patient (CS, personal communication, February 25, 2022). The second goal, that screening positives and negatives would be reported, was met, though the percentage of positive screens was less than this author and clinic staff predicted. Multiple factors are believed to contribute to this, including a decrease in the number of patients the clinic was seeing during the six-week implementation period. There were only a total of 26 patients that were screened for palliative care needs during the six-week implementation time. Clinic staff believes this occurred because of the increase in COVID cases in the town where the clinic is located (CS, personal communication, February 25, 2022). The clinic was seeing approximately 50–60% of its usual patient load and fewer elderly patients than they usually see weekly. These patients may be more likely to have conditions that merit palliative care needs (CS, personal communication, February 25, 2022). Another component is that staff reported most patients fit the clinical indicators section but not the general indicators section of the screening tool (CS,

personal communication, February 25, 2022). This information can help refine the screening tool to help those individuals that did not fit the general indicators section but could benefit from palliative care. However, even with these factors, this quality improvement project showed that the number of patients who screened positive for palliative needs was less than expected. Staff reported that the screening tool is useful and could be repeated every 6–12 months for some patients as they continue to decline (CS, personal communication, February 25, 2022). This aligns with the information collected in the literature review that palliative care screening increases health care staff awareness of palliative needs and can help the provider start palliative care discussions with patients and their families. Given the small number of patients screened for this project, there is simply not enough data to determine the implications for the community as a whole related to palliative care needs.

The third goal, that staff would be satisfied with the process change and screening tool, was met, as staff rated them 10/10 and 9.6/10 respectively. This shows a more than ideal satisfaction with the process change and screening tool. Factors contributing to this were the education about the process change and this author's knowledge about the current process in the clinic, which helped the screening process fit well with the current practice (CS, personal communication, February 25, 2022). These results can add to existing knowledge as the screening tool was used in the primary care setting to help identify palliative care needs and increase awareness for staff of palliative needs. Though there were fewer positive screens than anticipated, the tool proved to be helpful for health care staff in identifying those with palliative needs and considering palliative care for patients.

Lessons Learned

Multiple lessons were learned during the planning, implementation, and evaluation of this project. The first is that in order to implement a quality improvement project, the clinic staff and current process need to be well known to those completing the project. If the current situation is not well known, it can be difficult to bring about a practice change. The second is that there may be some circumstances that are out of the control of the author and will affect the project implementation and evaluation. These are variables that should be planned for, but at times, can occur unexpectedly. The last is that open communication with the clinic staff is imperative to ensure that the project goes smoothly and to truly understand the impact the project has.

Limitations

Multiple limitations occurred with this quality improvement project. Only patients aged 70 years and older were screened during six weeks; therefore, only part of the patient population who may need palliative care were relayed. Another limitation was the small sample that was used in this project, which leads to there needing to be larger, more representative studies. This project was also completed at a small, independently owned primary care clinic, with a decreased patient load during the implementation period, which makes it difficult to generalize the findings to other primary care clinics.

Patient Exemplar of Impact

During the implementation period, a patient was screened for palliative care needs and after a discussion between the patient, patient's family, and the provider, it was determined that a home hospice referral would benefit the patient. This patient previously had unplanned hospital

admissions, multiple falls, unplanned weight loss, and dementia. After home hospice was in place, the patient fell, and it was determined that the patient's symptoms would be treated at home and not at the emergency department. This is a great example of how quality of life can be improved, and health care costs can be decreased when palliative care is initiated.

Recommendations for Future Practice

The implementation of palliative care screening with the SPICT screening tool in the primary care setting can help improve future practice. Based on the results of this project, it was identified that having a screening tool can help clinic staff consider the possibility of palliative care for patients and can better identify those patients who would benefit. This can counteract the problem of not identifying patients who could benefit from palliative care in primary care. Another recommendation for future practice learned from project implementation was that essentials of palliative care can also be incorporated into the primary care setting. Many primary care providers already incorporate some of these essentials into their practice and having the knowledge base of palliative care in the primary care setting, can help patients receive these benefits right from their primary care provider. Palliative care has many benefits, as previously discussed, and by enlightening health care staff on how to better assess the need, patients can receive these benefits, overall improving patient care and outcomes.

CHAPTER FIVE

DNP ESSENTIALS

One purpose of this quality improvement project was to examine the growth that occurred as a doctorate prepared nurse practitioner student. One way in which to do this was reflecting on the doctoral essentials. Five of these essentials will be reflected upon in the coming section.

Essential 2: Organizational and Systems Leadership

Essential two states that the student will develop and evaluate care delivery approaches that meet current and future needs of patient populations based on scientific findings in nursing and other clinical sciences. The essential also ensures accountability for the quality of health care and patient safety for populations with whom they work by using advanced communication skills/processes, analyzing cost-effectiveness, and demonstrating sensitivity to diverse cultures and populations. I have achieved essential two through the development of my quality improvement project and my clinical experiences in the doctor of nursing (DNP) practice curriculum. Before starting this program, I had never developed and evaluated care delivery approaches based on scientific findings in nursing. My quality improvement project was developed based on evidence-based practice—showing improved patient outcomes with the addition of palliative care. The improved quality of health care and patient outcomes occurred through open communication with the health care team and patients. The evidence-based research also showed that the process of screening would decrease costs for patients while also improving direct patient care, which in turn improves care for all populations. The last aspect of

this essential is to ensure that ethical dilemmas are managed. I grew as a nurse through this process as I completed CITI training and submitted my quality improvement to the IRB, receiving approval for my project and its effective strategies for managing ethical dilemmas.

Essential 3: Clinical Scholarship and Analytical Methods

Essential three includes the ability to critically appraise existing literature and other evidence to determine and implement the best evidence for practice. Prior to starting the DNP program, I had never critically appraised existing literature and determined a strategy for implementation to improve patient care. Upon completion of this project, that is exactly what I did. Using established tools and criteria, I critically appraised existing literature on implementing palliative care screening in the primary care setting and determined the best screening tool to use based on the literature and the primary care clinic where the project was implemented. Another component of this essential is that the student will design and implement a process to evaluate the outcomes of that practice change and design, direct, and evaluate quality improvement methodologies to promote safe and patient-centered care. In this project, I determined appropriate outcomes measures and how they would be measured. Through the evaluation of my outcomes, or SMART goals, I was able to state if my outcomes were met and if the practice change promoted improvements in patient-centered care. I developed this evaluation and was able to identify that the quality improvement project implementation did improve patient-centered care.

Essential 6: Interprofessional Collaboration for Improving Patient and Population Health Outcomes

Essential six consists of the ability to employ effective communication and collaborative skills in the development and implementation of practice models, guidelines, standards of care, and scholarly products. It also includes the ability to lead teams in the ability to create change in health care and current delivery systems. Before the implementation of this quality improvement project, I had been a team member, as a nurse, in implementing practice change but had never been the leader of the practice change. Throughout the implementation of this project, I used effective communication skills to educate the health care team on the practice change and to collaborate with the team on implementing the practice change. This is the area where I feel that I have had the most growth, as it takes effective communication skills to educate, assess, and help the health care team improve patient care. Practice change is not always an easy task, and being able to lead the team for this change was a skill I have gained throughout this project. The evaluation showed that the process change was successful as health care staff rated a more than ideal satisfaction with the process change, which I do not think would have occurred without effective leadership and communication. Not only did I experience this through the quality improvement project, but also throughout my clinical experiences, as I communicated effectively with patients and other health care team members.

Essential 7: Clinical Prevention and Population Health for Improving the Nation's Health

Essential seven includes the analysis of appropriate scientific data related to individual and population health and the synthesis of concepts in developing, implementing, and evaluating interventions to address health promotion efforts and address gaps in the care of individuals or

populations. As a nurse, I had previously analyzed scientific data in the delivery of patient care but had never developed certain interventions to address gaps in care for patients. In completing a literature review for this project, I analyzed current scientific data in relation to palliative care needs and screening for patients. From this analysis, I asserted that screening was a gap in care, and this was confirmed when the clinic where I implemented the project reported they did not previously screen for palliative care needs. This was a gap in care, and patients were not receiving the benefits that palliative care can bring, such as increased quality of life, decreased health care costs, and improved caregiver support. The intervention of palliative care screening was also analyzed through a literature review, where the specific screening tool was selected based on the review and data. The care delivery method was then evaluated by discussions and surveys with the health care team, and recommendations for improvement were discussed and implemented as needed. Meeting this essential helped me to improve the health of this clinic's population.

Essential 8: Advanced Nursing Practice

Essential eight includes the assessment, diagnosis, intervention, and evaluation of patient care as related to nursing practice. Before starting the DNP program, I had extensive skills in the assessment and evaluation of patients while working as a nurse. Throughout this program in clinicals and this quality improvement, I have gained knowledge and skills in all areas of nursing practice. I have completed comprehensive and systematic assessments of over 600 patients in my clinical rotations, including complex situations. Evidence-based treatment has been used throughout my clinical experiences for the assessment, diagnosis, and intervention of patients with appropriate follow-up for those needs. In this quality improvement project, the effectiveness

of the intervention was evaluated and then adapted based on evaluation outcomes. I have developed and sustained therapeutic relationships with patients and the health care team as recognized by my evaluations and rapport with the health care team. My clinical judgment has improved greatly throughout this program, as I have improved my assessment and critical thinking skills to assess patient care needs and appropriately treat these needs, with improvements in patient outcomes. The last aspect of this essential is the ability to facilitate, educate, and guide the transition of individuals and groups. This is another area where I have seen the greatest growth in myself. This program, project, and clinicals have helped me to provide guidance for patients through a difficult time in their lives and help them both physically and psychologically. The ability to educate and guide patients to improve their overall quality of life is the goal of health care and is a skill that I have developed, improved, and will continue to improve throughout my career as a nurse practitioner.

Summary

In summary, after recognizing a potential gap in practice and following an extensive literature review, palliative care screening was implemented in a small private practice over a six week period. Of 38 eligible patients, 26 screenings were completed and three of these were positive. The biggest takeaways from this project are that screening for palliative care in the primary care setting can help assess the need for palliative care, can help health care staff initiate palliative care discussions with patients, and palliative care can be incorporated in the primary care setting, helping patients receive palliative care benefits. Last, as part of this project completion, personal and professional growth was noted in the achievement of DNP essentials.

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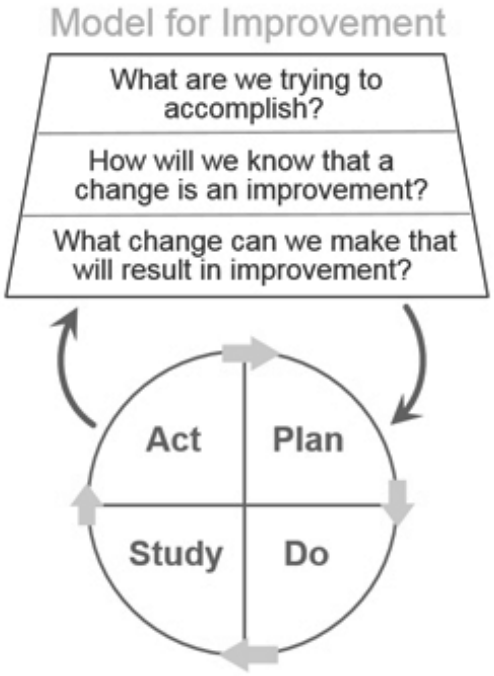
APPENDICES

APPENDIX A

PDSA CYCLE



Improvement in screening for palliative care needs for patients

Palliative care outcomes: Improved quality of life, decreased costs, and caregiver support.

Palliative care screening with the SPICT tool in the primary care setting.

Plan:

Objective: Implement palliative care screening in the primary care setting.

Prediction: This will increase individuals who are screened positive as needing palliative care needs.

Test the change:

Who:
Primary care nurse will be completing the screening.
Patients age 70 years and older will be screened.

What:
Education for nurses and provider on how to use and interpret screening tool.
Education for chart prep to put screening tool in paper chart.
Screening with the SPICT tool. (A positive screen occurs if greater than or equal to 2 general indicators and greater than or equal to 1 clinical indicator is noted.)

When:
Education session will occur during lunch break the two weeks prior to implementation.
Screening will occur at annual exams, sixth month follow ups, and hospital follow up appointments.

Where:
Primary care clinic.

APPENDIX B

RATING SCALE FOR STAFF AFTER EDUCATION SESSION

How confident are you in using the SPICT tool?

1	2	3	4	5	6	7	8	9	10
Not confident at all				Moderately confident					Very confident

How confident are you in the process change?

1	2	3	4	5	6	7	8	9	10
Not confident at all				Moderately confident					Very confident

APPENDIX C

RATING SCALE FOR STAFF USED EVERY TWO WEEKS

How useful is the SPICT tool in identifying palliative care needs?

1	2	3	4	5	6	7	8	9	10
Not useful at all				Moderately useful					Very useful

How easy is the SPICT tool to administer?

1	2	3	4	5	6	7	8	9	10
Not easy at all				Moderately easy					Very easy

How satisfied with the SPICT screening tool are you?

1	2	3	4	5	6	7	8	9	10
Not satisfied at all				Moderately satisfied					Very satisfied

Is the process change difficult to implement?

1	2	3	4	5	6	7	8	9	10
Very difficult				Moderately difficult					Not difficult at all

How satisfied are you with the process change?

1	2	3	4	5	6	7	8	9	10
Not satisfied at all				Moderately satisfied					Very satisfied

APPENDIX D

SUBJECT CONSENT FORM FOR PARTICIPATION

Subject Consent Form for Participation in Quality Improvement at Montana State University

A Pilot Implementation of Palliative Care Screening in the Primary Care Setting

You are being asked to take part in a quality improvement project. Before you decide to participate in this project, it is important that you understand why the project is being done and what it will involve. Please read the following information carefully. Please ask the author if there is anything that is not clear or if you need more information.

Purpose: To implement palliative care screening in the primary care setting.

Project Process:
Your thoughts on the screening tool and process will be asked every two weeks by using a rating scale.

Risks: There are no perceived risks associated with this quality improvement project.

Benefits: There will be no direct benefit to you for your participation in this project. However, we hope the information obtained will benefit patients in need of palliative care.

Confidentiality:

Your response to the rating scales and further communication with this author will be anonymous. Please do not write any identifying information on the rating scale.

Consent:

I have read and I understand the provided information and have had the opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason. I understand that I will be given a copy of this consent form. I voluntarily agree to take part in this project and submission of the questionnaire implies consent.

APPENDIX E

SPICT SCREENING TOOL

THE UNIVERSITY of EDINBURGH

Supportive and Palliative Care Indicators Tool (SPICT™)

NHS SCOTLAND

The SPICT™ is used to help identify people whose health is deteriorating. Assess them for unmet supportive and palliative care needs. Plan care.

Look for any general indicators of poor or deteriorating health.

- Unplanned hospital admission(s).
- Performance status is poor or deteriorating, with limited reversibility. (eg. The person stays in bed or in a chair for more than half the day.)
- Depends on others for care due to increasing physical and/or mental health problems.
- The person's carer needs more help and support.
- Progressive weight loss; remains underweight; low muscle mass.
- Persistent symptoms despite optimal treatment of underlying condition(s).
- The person (or family) asks for palliative care; chooses to reduce, stop or not have treatment; or wishes to focus on quality of life.

Look for clinical indicators of one or multiple life-limiting conditions.

Cancer

Functional ability deteriorating due to progressive cancer.

Too frail for cancer treatment or treatment is for symptom control.

Dementia/ frailty

Unable to dress, walk or eat without help.

Eating and drinking less; difficulty with swallowing.

Urinary and faecal incontinence.

Not able to communicate by speaking; little social interaction.

Frequent falls; fractured femur.

Recurrent febrile episodes or infections; aspiration pneumonia.

Neurological disease

Progressive deterioration in physical and/or cognitive function despite optimal therapy.

Speech problems with increasing difficulty communicating and/or progressive difficulty with swallowing.

Recurrent aspiration pneumonia; breathless or respiratory failure.

Persistent paralysis after stroke with significant loss of function and ongoing disability.

Heart/ vascular disease

Heart failure or extensive, untreatable coronary artery disease; with breathlessness or chest pain at rest or on minimal effort.

Severe, inoperable peripheral vascular disease.

Respiratory disease

Severe, chronic lung disease; with breathlessness at rest or on minimal effort between exacerbations.

Persistent hypoxia needing long term oxygen therapy.

Has needed ventilation for respiratory failure or ventilation is contraindicated.

Kidney disease

Stage 4 or 5 chronic kidney disease (eGFR < 30ml/min) with deteriorating health.

Kidney failure complicating other life limiting conditions or treatments.

Stopping or not starting dialysis.

Liver disease

Cirrhosis with one or more complications in the past year:

- diuretic resistant ascites
- hepatic encephalopathy
- hepatorenal syndrome
- bacterial peritonitis
- recurrent variceal bleeds

Liver transplant is not possible.

Other conditions

Deteriorating and at risk of dying with other conditions or complications that are not reversible; any treatment available will have a poor outcome.

Review current care and care planning.

- Review current treatment and medication to ensure the person receives optimal care; minimise polypharmacy.
- Consider referral for specialist assessment if symptoms or problems are complex and difficult to manage.
- Agree a current and future care plan with the person and their family. Support family carers.
- Plan ahead early if loss of decision-making capacity is likely.
- Record, communicate and coordinate the care plan.

Please register on the SPICT website (www.spict.org.uk) for information and updates.

SPICT™, April 2019

APPENDIX F

DATA COLLECTION PLAN: SCREENING RESULTS

Age	Result (Positive vs. Negative)

Table F1. Screening age and result table.

Week	Positive screens	Negative screens	Total patients that fit criteria
1	1	3	6
2	1	6	8
3	1	4	7
4	0	4	4
5	0	2	5
6	0	4	8
Total	3	23	38

Table F2. Weekly screening totals.

APPENDIX G

DATA ANALYSIS CALCULATIONS

$$\frac{\text{Total number of positive screens + total number of negative screens}}{\text{Total number of individuals who fit screening criteria}} = \boxed{\text{Percent of individuals that were screened}}$$

Equation G1.

$$\frac{\text{Total number of positive screens}}{\text{Total number of positive screens + total number of negative screens}} = \boxed{\text{Percent of individuals that screened positive out of total number screened}}$$

Equation G2.

Staff reported satisfaction, utility, and ease of use for tool and screening process:

Staff 1 + staff 2 + staff 3 + staff 4= Total rating for all staff / 4 = Average rating.

Equation G3.